CITY COUNCIL AGENDA ITEM COVER MEMO

	Agenda Item Number
Meeting Type: Regular	Meeting Date: 11/7/2013
Action Requested By: Engineering	Agenda Item Type <u>Select</u>
Subject Matter: Modification No. 1 to Agreement with Brown & Caldwell	
Exact Wording for the Agenda: Resolution authorizing the Mayor to modify the agreemer Engineering Hydrologic and Hydraulic Modeling Services a Submittal for a Portion of Beaverdam Creek 2 and Its Tril Modification No. 1	and letter of Man Dovicion (LOMP)
12-436	
Note: If amendment, please state title and number of	of the original
Item to be considered for: <u>Action</u> Unanimous Con	sent Required: <u>No</u>
Briefly state why the action is required; why it is recomme provide, allow and accomplish and; any other information that might be i	nelnful
This modification is for hydrologic and hydraulic modeling Encroachment Study on Beaverdam Creek 2 at Old Highwoof \$46,825.00. New end date: July 11, 2014. Account No.	av 70 for a total modification and a
	Budgeted Item: <u>Select</u>
MAYOR RECOMMENDS OR CONCURS: Select	
Department Head: The Man	Date: 10/23/13

ROUTING SLIP CONTRACTS AND AGREEMENTS

Originating Department: **Engineering**

Council Meeting Date: 11/7/2013

Department Contact: Lynn Majors

Phone # 256-427-5201

Contract or Agreement: Modification No. 1

Document Name: Brown & Caldwell Beaverdam Crk Project No. 65-12-DR06

City Obligation Amount:

\$46,825.00

Total Project Budget:

\$136,216.00

Uncommitted Account Balance:

0

Account Number:

23-6500-0816-8206

	Procurement Agreements
Not Applicable	Not Applicable
	Grant-Funded Agreements

Not	Grant Name:
Applicable	

Department	Signature	Date
1) Originating	+ath Marti	10/22/13
2) Legal	thipp	10-22-13
3) Finance		w/23
4) Originating		
5) Copy Distribution		
a. Mayor's office (1 copies)		
b. Clerk-Treasurer(Original & 2 copies)		

RESOLUTION	NO.	13-

BE IT RESOLVED by the City Council of the City of Huntsville, Alabama, that the Mayor be, and is hereby authorized, in Huntsville, Alabama, on behalf of the City of Huntsville, a municipal corporation in the State of Alabama to enter into Modification No. 1 to the Agreement with Brown and Caldwell, adopted and approved on the 24th day of May, 2012, by the City Council of the City of Huntsville, Alabama by Resolution No. 12-436, as attached hereto.

BE IT FURTHER RESOLVED that the total contract amount be and hereby is modified from EIGHTY-NINE THOUSAND THREE HUNDRED NINETY-ONE AND NO/100 DOLLARS (\$89,391.00) to ONE HUNDRED THIRTY-SIX THOUSAND TWO HUNDRED SIXTEEN AND NO/100 DOLLARS (\$136,216.00), including this Modification No. 1, an increase of FORTY-SIX THOUSAND EIGHT HUNDRED TWENTY-FIVE AND NO/100 DOLLARS (\$46,825.00). New contract completion end date: July 11, 2014. Agreement is substantially in words and figures similar to that document attached hereto and identified as "Modification No. 1 to Agreement between City of Huntsville and Brown and Caldwell for Engineering Hydrologic and Hydraulic Modeling Services and Letter of Map Revision (LOMR) Submittal for a Portion of Beaverdam Creek 2 and its Tributaries, Project No. 65-12-DR06, as adopted by Resolution No. 12-436 of May 24, 2012" consisting of a total of three (3) pages plus nine (9) additional pages consisting of Attachment "A", and the date of November 7, 2013, appearing on the margin of the first page, together with the signature of the President or President Pro Tem of the City Council, and an executed copy of said document being permanently kept on file in the Office of the City Clerk of the City of Huntsville, Alabama.

ADOPTED	this	the _	7th	_ day of _	November	, 2013.
				President the City	of the City of Huntsvill	Council of e, Alabama
APPROVED	this	the	7th	day of _	November	, 2013.
				Mayor of Alabama	the City of	Huntsville,

STATE OF ALABAMA)	Modification No. 1 to Agreement between
COLDIENT		the City of Huntsville and Brown and
COUNTY OF MADISON)	Caldwell for Engineering Hydrologic and
		Hydraulic Modeling Services and Letter of
		Map Revision (LOMR) Submittal for a
		Portion of Beaverdam Creek 2 and its
		Tributaries, Project No. 65-12-DR06,
		as adopted by Resolution No. 12-436 of
		May 24, 2012

THIS IS MODIFICATION NO. 1 TO AN AGREEMENT entered in on the 24th day of May, 2012, in the amount of EIGHTY-NINE THOUSAND THREE HUNDRED NINETY-ONE AND NO/100 DOLLARS (\$89,391.00). The original Agreement is hereby amended by Modification No. 1 dated November 7, 2013, in the amount of FORTY-SIX THOUSAND EIGHT HUNDRED TWENTY-FIVE AND NO/100 DOLLARS (\$46,825.00), for a revised contract amount of ONE HUNDRED THIRTY-SIX THOUSAND TWO HUNDRED SIXTEEN AND NO/100 DOLLARS (\$136,216.00), by and between the City of Huntsville, Alabama, a municipal corporation in the State of Alabama (Owner) and BROWN AND CALDWELL, (ENGINEER).

WITNESSETH

WHEREAS, the firm identified as the ENGINEER to the Agreement dated May 24, 2012, has proposed a change, identified as Attachment "A" to the Original Agreement. This modification delineates a change to hydrologic and hydraulic modeling services in support of a Floodway Encroachment Study on Beaverdam Creek 2 at Old Highway 20.

WHEREAS, the Owner desires that the contract drawings be altered to be consistent with Attachment "A" hereto.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, the Owner and the ENGINEER agree to the following modifications to the agreement:

1. Brown and Caldwell will provide for hydrologic and hydraulic modeling services in support of a Floodway Encroachment Study on Beaverdam Creek 2 at Old Highway 20 at a time and materials cost not to exceed FORTY-SIX THOUSAND EIGHT HUNDRED TWENTY-FIVE AND NO/100 DOLLARS (\$46,825.00). New contract completion end date: July 11, 2014.

5	
President of the	ne City Council of the City of
Huntsville, AL	y a carron or and only or
Date:	November 7, 2013

- 2. Item #1 shall be performed in accordance with the original agreement dated May 24, 2012, and approved by the City Council by Resolution No. 12-436, and as described in the letter from Lori Visone and Kelly Comstock to Gary Gleason, dated October 14, 2013, shown as Attachment "A".
- 3. The terms of this contract modification and the execution thereof is not in any way to be viewed as a waiver on the part of the Owner of any of its rights pursuant to the Contract.
- 4. All other terms and conditions remain unchanged.

IN WITNESS WHEREOF, the parties have entered their hands and seals and attest to the same with the signature of the Mayor being the official act of the said municipality in accordance with his duly constituted authority.

THE CITY OF HUNTSVILLE, ALABAMA, a municipal corporation

	Ву:	
	Tommy Battle	
	Its Mayor	
ATTEST:		
Charles E. Hagood City Clerk-Treasurer		

STATE OF ALABAMA) COUNTY OF MADISON)

I, the undersigned, a notary public in and for said County, in said State, hereby certify that Tommy Battle and Charles E. Hagood, whose names as Mayor and City Clerk-Treasurer of the City of Huntsville, a municipal corporation, are signed to the foregoing instrument, and who are known to me, acknowledged before me on this day that, being informed of the contents of the instrument, they, in their capacity as such officers, executed the same with full authority for and as the act of said corporation on the day the same bears day.

GIVEN under my hand and official seal thi	s the day of 2013
	Notary Public
	My Commission Expires:

ENGINEER: BROWN AND CALDWELL

By:

ATTEST:

STATE OF GEORGIA) COUNTY OF FULTON)

I, the undersigned, a notary public in and for said County, in said State, hereby certify that Kelly Comstock, as Vice President, is signed to the foregoing instrument, and who is known to me, acknowledged before me on this day that, being informed of the contents of the instrument, he, in his capacity as such officer, executed the same with full authority for and as the act of said Corporation on the day the same bears day.

GIVEN under my hand and official seal this the Atay of October, 2013.

Notary Publicary Public, Fulton County, Georgia My Commission Expression Expression Expression Dec. 10, 2013

Att A - Pg 1 of 9 - 11/07/13

401 Holmes Avenue NE, Sui ATTACHMENT "A'

Huntsville, AL 35801 Tel: 256-536-6280 Fax: 256-536-7583

www.brownandcaidwell.com

October 14, 2013



Mr. Gary Gleason City of Huntsville Engineering Divisions P.O. Box 308 Huntsville, Alabama 35801

1016-041040-014

Subject:

Proposal for a modification to Project 65-12-DR06 (Engineering Hydrologic & Hydraulic Modeling Service and LOMR Submittal for Portion of Beaverdam Creek 2 and Its Tributaries) to Perform Encroachment Analysis for Old Highway 20 at Beaverdam Creek 2 in support of City of Huntsville Transportation Project

Dear Mr. Gleason:

Brown and Caldwell (BC) is pleased to offer this proposal to the City of Huntsville (City) for a modification to Project 65-12-DR06 (Engineering Hydrologic & Hydraulic Modeling Service and LOMR Submittal for Portion of Beaverdam Creek 2 and Its Tributaries). The focus of this amendment is an encroachment analysis of Beaverdam Creek 2 in support of a Transportation Project for Old Highway 20. The following sections outline our approach and scope of work, deliverable, assumptions, cost estimate and schedule for this project.

Introduction

The City of Huntsville is contracting with ICA Engineering (ICA) to design transportation improvements for Old Highway 20 which crosses Beaverdam Creek 2 (Figure 1). This roadway crossing is located in the Federal Emergency Management Agency (FEMA) floodway as shown on Flood Insurance Rate Map (FIRM) 01089C290 D. Because these roadway improvements will include construction in the floodway, an encroachment analysis of the effects on the construction on the floodplain and floodway shall be performed.

If the project does not impact the Base Flood Elevation (BFE), and the floodway elevation and width, then a 'No-Rise/No-Impact' certification along with appropriate documentation in accordance with appropriate Federal Emergency Management Agency (FEMA) guidelines will be submitted to the City of Huntsville for review/comment, subsequent revision, and ultimately approval. If design constraints make a 'No-Rise/No-Impact' infeasible, then a Conditional Letter of Map Revision (CLOMR) application and supporting documentation shall be submitted to the Alabama Department of Economic and Community Affairs (ADECA) Office of Water Resources (OWR) prior to construction for their review and approval. If a CLOMR is submitted, then a follow-up Letter of Map Revision (LOMR) application and supporting documentation will be submitted similarly once an appropriate level of construction is complete. The following section details each task for the proposed scope of work.

Scope of Work

BC has developed the following scope of work in order to perform the encroachment analysis for Beaverdam Creek 2 at Old Highway 20. We have broken the tasks down as follows:

- Task 1 Encroachment Analysis
- Task 2 Methods and Results Documentation
- Task 3 'No-Rise/No-Impact' Submission
- Task 4 CLOMR Submission
- Task 5 LOMR Submission

If the encroachment analysis results in a 'No-Rise/No-Impact' determination, then Task 3 will be completed but not Tasks 4 and 5. If encroachment analysis results in a rise for the proposed project, then Tasks 4 and 5 will be completed but not Task 3. If the project results in a decrease, then Task 5 will be completed but not Task 3 and 4. A detailed discussion of each of these tasks is provided in the following sections.

Task 1 Encroachment Analysis

BC, under a separate contract with the City, recently obtained the Effective HEC-2 model for Beaverdam Creek 2 from FEMA. Also as a part of that contract, the model was converted to HEC-RAS and run to generate the Duplicate Effective. The next step was the development of the Corrected Effective /Existing Conditions model. This model corrected identified errors in the Duplicate Effective, added additional cross sections, and incorporated more detailed topographic information while adding any modifications that have occurred since the Effective model was developed. Survey data and more detailed topographic information were used to update the model and generate the Corrected Effective /Existing Conditions for Beaverdam Creek 2. This model will be used as the starting point for analysis for this project.

Proposed Conditions Model

The Corrected Effective/Existing Conditions model will be revised to reflect the proposed modifications for the crossing of Old Highway 20 over Beaverdam Creek 2. ICA will provide BC with the design plans as needed to support modeling of the proposed conditions. BC will model up to three proposed conditions scenarios.

BC will meet with ICA and the City up to three times to discuss appropriate survey control (to match that of the model), proposed conditions plans and/or review model results.

Task 2 Methods and Results Documentation

BC will develop a single comprehensive report to document the methods used and results for the Beaverdam Creek 2 encroachment analysis. The report will include details for each of the models developed as part of Task 1 including changes or additions made to the model, source or the method for development of any new or revised inputs, and results of the hydraulic model. The report will also include appropriate figures, as well as a CD with all digital data in appropriate formats.

Task 3 'No-Rise/No-Impact' Submission

If a 'No-Rise/No-Impact' condition is met for the proposed project, BC will complete a 'No-Rise/No-Impact' Certification following appropriate FEMA guidelines and submit the certification

along with the comprehensive report (Task 2) to the City of Huntsville for review/comment, subsequent revision, and ultimately approval. BC will meet with the City once to review the report and model results. BC will address one set of consolidated comments from the City and generate and submit a final 'No-Rise/No-Impact' Submission to the City.

Task 4 CLOMR

If the proposed project results in an increase to the effective BFE, floodway elevations or floodway width based on the design, then BC will apply to OWR for a CLOMR.

Task 4.1 CLOMR Submission

BC will prepare a single CLOMR application/request package of the proposed conditions based on final design plans provided by ICA. The package will include the appropriate FEMA forms (MT-2) and the comprehensive report (Task 2). In addition, BC will develop (including field investigation) and include in the package the required Endangered Species Act (ESA) documentation and alternatives discussion. For the purpose of scoping, BC has assumed that the ESA investigation will produce a finding of "No Effect" on proposed or listed species or designated critical habitat. If our cursory examination reveals that there are potential environmental concerns, we will cease investigations and consult with ICA/the City to determine the follow-on course of action and adjust our scope and fee accordingly. The City will generate and distribute the FEMA-required property owner notifications per 65.7(b)(1) of the NFIP regulations to be included in the application package.

BC will submit the CLOMR application package to the City for review/comment, subsequent revision, and ultimately concurrence. BC will forward the CLOMR package to the OWR with any required review fees provided by the City.

OWR has a 90-day time frame in which to respond to the submittal and may ask for more information via an "AD" (additional data) letters, e-mails, or informal calls

Task 4.2 Additional Data Request

The number of times OWR/FEMA can request additional information (whether formally with additional AD letters or informally by phone, e-mail, etc.) is not limited. As a result, this task is established to handle potential requests beyond the initial AD letter and minimum information required for a CLOMR application/request. BC will get prior City approval before performing any work under this task. All OWR requests and responses shall be documented and provided to the City for review/comment and possible revision prior to being submitted to OWR. BC will provide the City with an updated Comprehensive Report that reflects any revisions made as a result of OWR comments and data request. Should the fee associated with this scope not be sufficient to accommodate OWR requests for additional information, BC will develop an estimate to address the comments using the rates listed in the proposal for a possible additional contract or existing contract modification for approval prior to continuing the additional work.

Task 5 LOMR

If the proposed project results in an increase or decrease in the Effective BFE, floodway elevations or floodway width following construction per the 'as-built' condition, BC will apply to OWR for a LOMR after the project is constructed.

Task 5.1 LOMR Submission

ICA will provide BC with signed and sealed drawings (both hard copy and digital) of the 'as-built' conditions for Old Highway 20 and Beaverdam Creek 2 crossing. BC will update the proposed conditions HEC-RAS model to reflect 'as constructed' conditions.

BC will prepare a single LOMR application/request package of the existing conditions. BC will submit the LOMR application package to the City for review/comment, subsequent revision, and ultimately concurrence. The City will generate and distribute the FEMA-required property owner notifications per 65.7(b)(1) of the NFIP regulations. BC will forward the LOMR package to the OWR with any required review fees provided by the City.

OWR has a 90-day time frame in which to respond to the submittal and may ask for more information via an "AD" (additional data) letters, e-mails, or informal calls.

Task 5.2 Additional Data Request

The number of times OWR/FEMA can request additional information (whether formally with additional AD letters or informally by phone, e-mail, etc.) is not limited. As a result, this task is established to handle potential requests beyond the initial AD letter and minimum information required for a LOMR application/request. BC will get prior City approval before performing any work under this task. All OWR requests and responses shall be documented and provided to City for review.comment and possible revision prior to being submitted to OWR. BC will provide the City with an updated Comprehensive Report that reflects any revisions made as a result of OWR comments and data request. Should the fee associated with this scope not be sufficient to accommodate OWR requests for additional information, BC will develop an estimate to address the comments using the rates listed in the proposal for a possible additional contract or existing contract modification for approval prior to continuing the additional work.

Deliverables

- Meeting notes for up to three meetings with ICA
- Meeting notes for up to three meetings with the City
- Comprehensive Project Report
 - One hard-copy and electronic version of a draft report in Word format will be provided for review and comment by the City.
 - o After addressing City comments on the draft report, two hard copies of the final report (including a disk with all related electronic files in appropriate formats) will be submitted to the City. Additionally, the final text and figures of the report will be scanned into a comprehensive color PDF file and provided on disk with all related electronic files. Generally the report will include:
 - Hydraulic Documentation—a summary of modifications made to the model and model results
 - No-Rise/No-Impact certification OR complete CLOMR/LOMR application request package(s) (as applicable)
 - Survey data
 - Control documentation

- Digital points, geographically (x, y, and z) located
- Annotated sketches of conveyance openings at bridges/culverts
- Electronic photograph files.
- A CD of all related electronic data, including spreadsheets, model files, GIS data, CAD files, and survey point files, as well as the scanned color PDF file of the report (as previously discussed).
- o Updated Comprehensive Report (if applicable)
 - One hard copy and electronic version reflecting modifications made as a part of the OWR review. Deliverable will include the same components detailed under the Comprehensive Report deliverable.

Assumptions

The following assumptions have been applied in the development of this proposal:

- 1. Project fee does not include OWR/FEMA fees of any kind.
- 2. No public notifications or meetings are included as part of this proposal.
- 3. BC cannot guarantee that FEMA will grant a CLOMR/LOMR. A set amount of time has been allotted (49 hours for the CLOMR and 49 hours for the LOMR) to addressing OWR comments. If OWR comments require time beyond this allotment, BC will develop an estimated cost for addressing comments based on the labor rate list on the following page.
- 4. The City's 2-foot topography and 2010 aerial photographs cover the entire study area.
- 5. The City will provide horizontal and vertical control and datum information for the City-supplied 2-foot topographical data, as required by FEMA.
- 6. If a CLOMR submission is required, the ESA investigation will produce a finding of "No Effect".
- 7. ICA will provide all needed design drawings/files in a timely manner to meet the project schedule.
- 8. ICA will provide signed and sealed 'as-built' drawings for submission to OWR.

Cost Estimate

shown in the table but will be a function of the results of Task 1. If a 'No-Rise/No-Impact' condition is achieved, then Tasks 1, 2, and 3 will be completed materials basis not to exceed, using the hourly rates indicated in the personnel fee schedule also shown. The total project fee will not be \$46,825 as for a fee of \$23,510. For a decrease (and no increase) of BFE, floodway elevation or floodway width, Tasks 1, 2, and 5 will be completed for a fee of A summary of the effort required for this project is presented in the project cost estimate table below. Labor effort will be charged on a time-and-\$28,287. For an increase of BFE, floodway elevation or floodway width, Tasks 1, 2, 4 and 5 will be completed for a fee of \$42,306.

Table 1. Project Cost Estimate

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Task Task Description Number Sub-task Description Tencroachment Analysis Proposed Conditions Project Meetings and PM 2 Methods and Results Documentation Draft Report	Project Meetings and PM	3 'No-Rise/No-Impact Submission	Develop "No-Rise/No-Impact Package and submit to City Address comments and finalize		4 CLOMR Submission	Develop CLOMR Package and submit to City Address OWR/FEMA comments	5 OMB Submission	·				
L Z	\perp				_		_					

Table 2. B	rown and Caldwe	Il Personnel Fee Schedule
Classification	Rate	Staff
Managing Engineer/Scientist	\$196	Jeff Herr
Supervising Engineer/Scientist	\$181	Joel Jordan, Hai Clarkson
Senior Engineer/Scientist	\$158	Lori Visone, Jill Stachura, Aylin Lewallen
Project Engineer/Scientist	\$141	Carl McDonald
Engineer/Scientist III	\$116	Arvind Narayanan, Neil Schaap
Engineer/Scientist !!	\$100	·
Engineer/Scientist	\$94	Andrea Althoff
GIS Specialist	\$88	Ryan Jones, Amanda Mesick
Accounting & Word Processing	\$76	Rhona Gonzales, Elaine Sharpe, Carol Sullins

These Rates will remain in effect throughout the duration of the contract.

Schedule

The work defined herein shall begin immediately upon receiving a signed agreement. The estimated project schedule is provided below. As noted previously, Tasks 3 – 5 will not all be completed but the determination of the needed tasks is contingent on the outcome of Task 1.

Table 3. Proposed Schedule						
		Month 1	Month 2	Month 3	Month 4	Month x
Task 1	Encroachment Analysis					
Task 2	Documentation					
Task3	'No-Rise/No-Impact' Submission ¹					
Task 4	CLOMR Submission ²					M
Task 5	LOMR Submission ³					The walk

¹If applicable, the 'No-Rise/No-Impact' package will be submitted to the City by the end of Month 4. Finalization of Task 3 will be dependent upon the City's review schedule.

²If applicable, the CLOMR package will be submitted to the City by the end of Month 4. Submission of the CLOMR package to OWR will be dependent upon the City's review schedule. BC will finalize the CLOMR package and submit to the OWR within one month of receipt of comments from the City. Finalization of Task 4 will be dependent upon the OWR review schedule.

³If applicable, the LOMR package will be submitted to the City within one month of receiving the 'as-built' drawings from ICA. Submission of the LOMR package to OWR will be dependent upon the City's review schedule. BC will finalize the LOMR package and submit to the OWR within one month of receipt of comments from the City. Finalization of Task 5 will be dependent upon the OWR review schedule.

Thank you for the opportunity to submit this proposal for engineering and consulting services. Do not hesitate to call with questions or to request additional information.

Very truly yours,

Brown and Caldwell

Lori Visone, P.E. Project Manager

LDV:ldv

Attachments (1)

1. Figure 1

Kelly Comstock, PE, BCEE Vice President

